

RCE & Amendment
Serial No.: 10/612,784
Attorney Docket No.: ORW01-GN004

In the Claims:

1. (CURRENTLY AMENDED) A prosthetic device for use with a hip replacement prosthesis that includes an acetabular cup assembly to be fastened to a patient's pelvis and a femoral stem to be fastened to the patient's femur, where the femoral stem includes a ball component at its proximal end received within the acetabular cup assembly to form a ball joint type coupling, the prosthetic device comprising:

an acetabular liner having mating features to releasably engage corresponding mating features of an acetabular cup permanently mounted to the patient's pelvis; and

a semiannular augment to be mounted approximate to a rim of an acetabular cup assembly liner of a hip replacement prosthesis, wherein the semiannular augment assists in improving stability of a ball joint type coupling by increasing the height of a portion of the rim of the acetabular cup liner, at least temporarily, between the acetabular cup assembly liner and a femoral stem of the hip replacement prosthesis while allowing rotational and angular movement between the acetabular cup assembly and the femoral stem;

the semiannular augment being formed from an augment material selected from the group consisting comprising at least one of a biologic material, a biologically absorbable material, and a combination of biologic and biologically absorbable materials; and

wherein the augment material is supplemented with at least one of an agent to promote the formation of scar tissue, a clotting agent, and an antibacterial agent; and wherein the augment material does not form scar tissue.

2. (ORIGINAL) The prosthetic device of claim 1, further comprising at least one fastener for mounting the semiannular augment to the acetabular cup assembly, the fastener being formed from a fastener material selected from the group consisting of a biologic material, a biologically absorbable material, and a combination of biologic and biologically absorbable materials.

3. (CANCELLED)

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4. (ORIGINAL) The prosthetic device of claim 2, wherein the fastener comprises at least one of:

- a screw;
- a snap;
- a clip;
- a keyway;
- a dowel; and
- a rivet.

5. (ORIGINAL) The prosthetic device of claim 1, wherein the augment material includes at least one, or an equivalent, of:

- extra cellular matrices (ECMs);
- poliglecaprone 25;
- polydioxanone;
- surgical gut suture (SGS);
- gut;
- polyglactin 910;
- human autograft tendon material;
- collagen fiber;
- poly-L-lactic acid (PLLA);
- polylactic acid (PLA);
- polylactides (Pla);
- racemic form of polylactide (D,L-Pla);
- poly(L-lactide-co-D,L-lactide);
- polyglycolides (PGa);
- polyglycolic acid (PGA);
- polycaprolactone (PCL);
- polydioxanone (PDS);
- polyhydroxyacids; and
- resorbable plate material.

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6. (ORIGINAL) The prosthetic device of claim 5, wherein the extra cellular matrices (ECMs) include at least one of:

- porcine small intestine submucosa (SIS);
- xenogeneic small intestine submucosa (xSIS);
- urinary bladder submucosa (UBS);
- laminated intestinal submucosa; and
- glutaraldehyde-treated bovine pericardium (GLBP).

7-13. (CANCELLED)

14. (ORIGINAL) The prosthetic device of claim 2, wherein the semiannular augment includes at least one integrated fastener.

15. (ORIGINAL) The prosthetic device of claim 14, wherein the integrated fastener includes a snap-on retention member enabling snap-on-type mounting of the semiannular augment to the acetabular cup assembly.

16-26. (CANCELLED)

27. (CURRENTLY AMENDED) A hip prosthesis comprising:

- an acetabular cup assembly to be fastened to a patient's pelvis, the acetabular cup assembly including an acetabular liner having mating features to releasably engage corresponding mating features of an acetabular cup permanently mounted to the patient's pelvis;

- a femoral stem to be fastened to the patient's femur, the femoral stem including a ball component at its proximal end received within the acetabular liner ~~acetabular cup assembly~~ to form a ball joint type coupling; and

- a semiannular augment to be mounted to a distal end of the acetabular liner ~~acetabular cup assembly~~, adjacent to the ball component, wherein the semiannular augment assists in stabilizing the ball joint type coupling between the acetabular liner ~~acetabular cup assembly~~ and the femoral stem by temporarily increasing the height of a portion of the rim of the acetabular liner ~~acetabular cup~~, while enabling rotational and

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angular movement between the acetabular liner ~~acetabular-cup-assembly~~ and the femoral stem;

the semiannular augment being formed from an augment material selected from ~~the group consisting~~ comprising at least one of a biologic material, a biologically absorbable material, and a combination of biologic and biologically absorbable materials; and

wherein the semiannular augment includes at least one integrated fastener; and
wherein the augment material does not form scar tissue.

28. (PREVIOUSLY AMENDED) The hip prosthesis of claim 27, wherein the fastener is formed from a fastener material selected from the group consisting of a biologic material, a biologically absorbable material, and a combination of biologic and biologically absorbable materials.

29. (ORIGINAL) The hip prosthesis of claim 28, wherein the fastener material includes at least one, or an equivalent, of:

a poly-L-lactic acid material; and
collagen.

30. (ORIGINAL) The hip prosthesis of claim 28, wherein the fastener comprises at least one of:

a screw;
a snap;
a clip;
a keyway;
a dowel; and
a rivet.

31. (ORIGINAL) The hip prosthesis of claim 27, wherein the augment material includes at least one, or an equivalent, of:

extra cellular matrices (ECMs);
poliglecaprone 25;

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polydioxanone;
surgical gut suture (SGS);
gut;
polyglactin 910;
human autograft tendon material;
collagen fiber;
poly-L-lactic acid (PLLA);
polylactic acid (PLA);
polylactides (Pla);
racemic form of polylactide (D,L-Pla);
poly(L-lactide-co-D,L-lactide);
polyglycolides (PGa);
polyglycolic acid (PGA);
polycaprolactone (PCL);
polydioxanone (PDS);
polyhydroxyacids; and
resorbable plate material.

32. (ORIGINAL) The hip prosthesis of claim 31, wherein the extra cellular matrices (ECMs) include at least one of:

porcine small intestine submucosa (SIS);
xenogeneic small intestine submucosa (xSIS);
urinary bladder submucosa (UBS);
laminated intestinal submucosa; and
glutaraldehyde-treated bovine pericardium (GLBP).

33-36. (CANCELLED)

37. (ORIGINAL) The hip prosthesis of claim 27, wherein the augment material is supplemented with an agent to promote the formation of scar tissue.

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38. (WITHDRAWN) The hip prosthesis of claim 27, wherein the augment material is supplemented with a clotting agent.

39. (WITHDRAWN) The hip prosthesis of claim 27, wherein the augment material is supplemented with an antibacterial agent.

40-108. (CANCELLED)

109. (NEW) A prosthetic device for use with a hip replacement prosthesis, the prosthetic device comprising:

- an acetabular liner for receiving a femoral head component of a femoral prosthesis, the acetabular liner including mating features to releasably engage corresponding mating features of an acetabular cup permanently mounted to an acetabulum of a subject; and

- a plurality of semiannular augments for mounting to a rim of the acetabular liner, wherein the plurality of semiannular augments assists in improving stability of a ball joint type coupling by increasing a height of a portion of the rim of the acetabular liner, at least temporarily, between the acetabular liner and a femoral stem of the femoral prosthesis while allowing rotational and angular movement between the acetabular liner and the femoral prosthesis;

- the plurality of semiannular augments being formed from an augment material comprising at least one of a biologic material, a biologically absorbable material, and a combination of biologic and biologically absorbable materials.

110. (NEW) A prosthetic device for use with a hip replacement prosthesis, the prosthetic device comprising:

- an acetabular liner for receiving a femoral head component of a femoral prosthesis, the acetabular liner including at least one circumferentially oriented recess to releasably engage a corresponding projection of an acetabular cup permanently mounted to an acetabulum of a subject; and

- a semiannular augment for mounting to a rim of the acetabular liner, wherein the semiannular augment assists in improving stability of a ball joint type coupling by

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increasing a height of a portion of the rim of the acetabular liner, at least temporarily, between the acetabular liner and a femoral stem of the femoral prosthesis while allowing rotational and angular movement between the acetabular liner and the femoral prosthesis; the semiannular augment being formed from an augment material comprising at least one of a biologic material, a biologically absorbable material, and a combination of biologic and biologically absorbable materials.